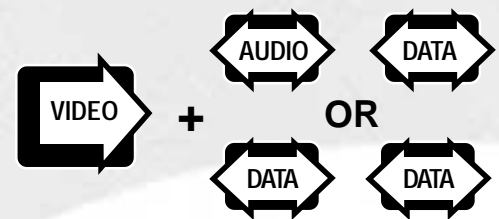


## FM Video with Two Duplex Channels over Two Fibers



### FEATURES:

- Surface Mount Technology (SMT) for High Reliability and Repeatability
- Hot Swappable Cards
- Laser Based Back-Biased Photo Detection Circuitry for Stable Optical Output Over Full Temperature Range (Singlemode)
- ST™, FC Optical Connector
- 7MHz Video Bandwidth
- 10Hz to 20KHz Audio Bandwidth
- DC to 300Kb/s Data Rate
- Meets EIA RS-170, RS-343A
- Frequency Modulated (FM) Transmission
- SpectraSmart™ Compatible
- Meets NEMA TS1/TS2 and Caltrans Specifications
- Utilizes Internal Switching Power Supplies
- Meets RS-250C Transmission Requirements
- Compatible with All NTSC, PAL, or SECAM Systems
- Automatically Resettable Solid-State Current Limiters on All Power Lines: Provides Equipment Protection
- Wide Optical Dynamic Range: Optical Attenuators are Never Required
- BNC Video Connector
- DB Type Connector for Data and/or Audio

### DESCRIPTION:

The Series 600 Frequency Modulated (FM) fiber optic video systems that transmit duplex video, voice and data signals for distances of 6Km on multimode fiber and over 100Km on singlemode fiber. The Series 600 operates over two optical fibers. PAL, SECAM or NTSC formats, in B&W or color, are seamlessly transmitted. The Series 600 capabilities are enhanced by it's compatibility with Meridian's PC based SpectraSmart™ Network Management and Diagnostic software system. SpectraSmart™ supervises the operating parameters of the transmission system such as status on video levels, sync, FM carrier detect, voltage, temperature, optical levels, etc., and external equipment which are attached to the Meridian equipment. See the SpectraSmart™ brochure for more details.

### CONFIGURATIONS:

The 600 product family is available in rack mount cards that can be installed in all of Meridian's card chassis, desk chassis and 19" racking frames. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. This product requires no user adjustments & features superior quality and performance.

### APPLICATIONS:

Security and Surveillance  
 Intelligent Transportation System (ITS)  
 Video Teleconferencing

## SPECIFICATIONS:

### Video

Format	NTSC, PAL, SECAM
Voltage/Impedance	1 Vp-p, 75 Ohm, 1.5 Vp-p max.
Bandwidth	5 Hz to 7 MHz @ -3 dB
Differential Gain	<2% typical
Differential Phase	<1.5° typical
SNR	64 dB weighted*
Return Loss	>30 dB
Field Tilt	<0.5% max.
Carrier Frequency	70 MHz

### Audio

I/O Impedance	600 Ohm, 10 kOhm, 47 kOhm
	Balanced/Unbalanced
I/O Level	-6 to +6 dBm
Frequency Response	10 Hz to 20 KHz
THD	<1%, 1 KHz @ max modulation
SNR	>60 dB (weighted)*

### Data

Formats	RS-232D, RS-422A, GenLock, Manchester, Biphase, 4-20mA
	Current Loop, TTL, Contact Closure
Rate	DC to 300 Kb/s
Bit Error Rate	10 <sup>-9</sup> *

### Connectors

Video	75 Ohm BNC (Gold Center Pin)
Audio	DE-15 Female
Data	DE-15 Female
Optical	ST™, FC
Power	5 Pin Male DIN

### Power \*\*

Transmitter Module	220 mA @ 24 VAC
Transmitter Card	5.25 W
Receiver Module	215 mA @ 24 VAC
Receiver Card	5.25 W
Adapter for SR-1000	Model PS-100

### Indicators (LEDs)

Red	Power On
Green (6)	Video, Audio, Data Activity LED's

### Physical

Dimensions:

Module (w/SR-1000)	182 mm (7.16") L, 165 mm (6.5") W
	44 mm (1.75") H
Card	160 mm (6.3") L, 40 mm (1.7") W
	100 mm (4") H

Weight:

Module (w/SR-1000)	1350 g (48 oz.)
Card	675 g (24 oz.)
Number of Rack Slots	Two

### Enviromental

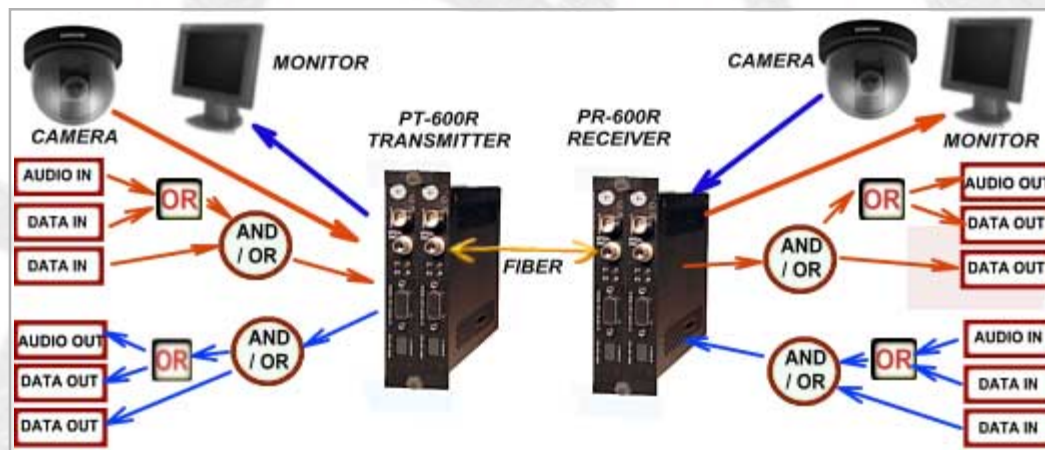
Operating Temperature	-40°C to +74°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

### Quality

MTBF	>145,000 hours @ Ground Fix
	35°C per MIL217F

\* As per RS-250C, measured @ 1Km (multimode), @ 10Km (singlemode)

\*\* Due to variations of drivers and diagnostic options, power shown at maximum measurements



## OPTICAL:

Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)
Multimode* (SLED)						
62.5/125	-13	-34	21**	850	ST	39
62.5/125	-16	-34	18**	1300	ST	39
62.5/125	-15/-18	-33/-33	15**	850/1300	ST	39
Singlemode (Laser)						
9/125	-7***	-36	29	1310	ST, FC	41
9/125	-10***	-36	26	1550	ST, FC	41
9/125	-10/-10	-34	24	1310/1550	ST, FC	41

\* Distance is limited to fiber loss, splices and fiber bandwidth

\*\* For 50/125um fiber, subtract 3dB

\*\*\* Higher output lasers available

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